

DESIGNATION OF INVENTORS

FIRST INVENTOR:

NAME: José María SERICHOL BLASCO

ADDRESS: Cervantes, 1º dcha,
50070 Zaragoza, Spain

CITIZENSHIP: Spain

PRIORITY: Spanish No. 200100378
Filed February 20, 2001

TITLE: SYSTEM FOR MAKING AUTOMATIC BACKUP COPIES OF
COMPUTER FILES WHEN A PERSONAL COMPUTER IS
SWITCHED OFF

UNITED STATES SPECIFICATION

TO ALL WHOM IT MAY CONCERN:

BE IT KNOWN that I, José María Serichol Blasco, a citizen of Spain, having an address of Cervantes, 1º dcha, 50070 Zaragoza, Spain, have invented certain new and useful improvements in a

SYSTEM FOR MAKING AUTOMATIC BACKUP COPIES OF COMPUTER FILES WHEN A PERSONAL COMPUTER IS SWITCHED OFF

of which the following is a specification.

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention refers to an automatic system for making backup copies of computer files when a personal computer is switched off, which can be used to make automatic backup copies when the computer is switched off.

2. The Prior Art

The use of computers, especially personal computers, is widespread today. These computers use binary files which, if corrupted, or in the event of a failure of the equipment where they are stored, can lead to a loss of valuable information which sometimes cannot be replaced, leading to economic consequences.

To avoid mishaps of this kind, modern computers are equipped with storage units to make copies of valuable files. These units include streamer tapes, high capacity storage disks with writable CD ROMS, etc.

However, to make backup copies using these units requires the user's intervention before switching off the computer, thus obliging the user to wait until the backup copy has been made before actually switching off the computer.

SUMMARY OF THE INVENTION

It is therefore an object of the invention to provide a backup system that automatically backs up the files when the computer is switched off.

The construction and use of the system referred to in this invention allows a backup copy of user and system files to be made when the personal computer is switched off. With this system, the user need not wait around for the backup to finish in order to switch off the computer, since both the backup itself and the switching off of the computer are automatic.

The system comprises a personal computer, an internal or external backup unit with sufficient capacity, a main power relay and control software. When the order is given to disconnect the system, the control software automatically runs a configurable copy of the files selected by the user from the hard drive to the storage unit.

The files copied may be selected individually by the user. All files on the hard drive(s) may be copied if there is enough room on the storage unit, and the backup unit saves the user's selection for future backups.

A security code guarantees that the user is the only one who can change the configurable parameters of the system operation (files to be copied, storage where the copies are to be stored, etc.) This code is also required to abort backup processes and to restore the copied files, since the backup is encrypted.

If an error occurs during the backup, the program generates warnings, indicating the cause of the error. In this case, the computer may or may not shut down, depending on how it has been configured by the user.

When the backup process is complete, the computer is switched off by means of a principal power relay controlled by a system module or by a disconnection device built into the computer and controlled by commercial software such as an ATX board or Windows operating system.

BRIEF DESCRIPTION OF THE DRAWINGS

Other objects and features of the present invention will become apparent from the following detailed description considered in connection with the accompanying drawing. It is to be understood, however, that the drawing is designed as an illustration only and not as a definition of the limits of the invention.

FIG. 1 shows a block diagram of the system according to the invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now in detail to the drawing, FIG. 1 shows the system 1 comprised of a personal computer 2, an external storage unit 3 such as a streamer, a principal relay 4 and configurable control software.

When a command is given for the computer to be switched off, the system runs a backup of some or all of the files on the hard drives(s) depending on the selection parameters, to the backup unit chosen by the user. When the backup is complete, the system is disconnected by means of relay 4.

By means of a user code, the system software prevents the configuration parameters from being changed by anyone other than the user. The code must also be entered to abort a backup process and to restore the backup files which are encrypted.

Accordingly, while only a single embodiment of the present invention has been shown and described, it is obvious that many changes and modifications may be made thereunto without departing from the spirit and scope of the invention.